REMARKS

Claims 1-10 and 21-35 were pending in this application.

Claims 1-10 and 21-35 have been rejected.

Claims 1, 8, 21, and 29 have been amended as shown above.

Claims 1-10 and 21-35 remain pending in this application.

Reconsideration and full allowance of Claims 1-10 and 21-35 are respectfully requested.

I. REJECTION UNDER 35 U.S.C. § 112

The Office Action rejects Claims 1-10 and 21-35 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Office Action also rejects Claims 1-10 and 21-35 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention.

The Applicant has amended Claims 1, 21, and 29 as shown above. In particular, the Applicant has amended these claims to recite that (i) a wet etch process is performed to etch through a first oxide layer and (ii) the wet etch process is performed to partially etch into a second oxide layer. These elements are clearly supported in the Applicant's specification, such as in paragraphs [0032]-[0035] and in original Claim 8. The Applicant respectfully submits that these amendments overcome the § 112 rejections.

Accordingly, the Applicant respectfully requests withdrawal of the § 112 rejections and full allowance of Claims 1-10 and 21-35.

II. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 1-10 and 21-35 under 35 U.S.C. § 103(a) as being unpatentable over Applicant Admitted Prior Art ("*APA*") in view of U.S. Patent No. 6,168,977 to Konishi ("*Konishi*") and Tenney et al., "Etch Rates of Doped Oxides in Solutions of Buffered HF" ("*Tenney*"). The Applicant respectfully traverses this rejection.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP § 2142; In re Fritch, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)*). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)*). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)*). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. (*In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)*).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)*). To establish a *prima facie* case of

obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (*MPEP § 2142*).

Claim 1 has been amended to recite that a "wet etch process" is performed on a "phosphorus doped oxide layer" for a calculated "time period" to etch through the phosphorus doped oxide layer. Claim 1 also recites that the "wet etch process" is performed on a "boron doped oxide layer" after the wet etch process has "etched through [the] phosphorus doped oxide layer to partially etch into the boron doped oxide layer."

APA recites etching a single oxide layer 130 to a desired thickness. (*Application, Pars. [0027]-[0028]*). *APA* lacks any mention of (i) performing a wet etch process for a calculated time period to etch through one oxide layer and (ii) performing the wet etch process to etch partially into another oxide layer as recited in Claim 1.

Konishi recites a semiconductor device having a first insulation layer 4, a stopper portion 5b, and a second insulation layer 6. (*Col. 3, Lines 15-60*). The second insulation layer 6 is dry etched down to the stopper portion 5b, and the stopper portion 5b is dry etched to reveal the first insulation layer 4. (*Col. 4, Lines 8-63*).

Konishi simply recites performing multiple dry etches to etch through the insulation layer

6 and the stopper portion 5b. *Konishi* lacks any mention of (i) performing a wet etch process for a calculated time period to etch through one oxide layer and (ii) performing the wet etch process to etch partially into another oxide layer as recited in Claim 1.

Moreover, the Office Action cites *Konishi* as disclosing the use of a "pattern 5b" having a faster etch rate than an insulation layer 4. The Office Action asserts that the "time required for etching" is inherently calculated in *Konishi* "in order to stop [the] process from further etching into the lower layer 4." (*Office Action, Page 4, Second paragraph*). The Office Action's position teaches away from Claim 1, which recites that (i) a "wet etch process" is performed for a calculated "time period" to etch through a first oxide layer and (ii) the "wet etch process" is performed to partially etch into a second oxide layer. If anything, the assertions made in the Office Action would lead a person skilled in the art away from the Applicant's claimed invention, including the recitation in Claim 1 that the "wet etch process" is performed to partially etch into the second oxide layer after being used to etch through the first oxide layer.

Tenney is cited merely to show the relative wet etch rates of PSG and BSG. (*Office Action, Page 4, Third paragraph*). *Tenney* is not cited as disclosing, teaching, or suggesting (i) performing a wet etch process for a calculated time period to etch through one oxide layer and (ii) performing the wet etch process to etch partially into another oxide layer as recited in Claim 1.

For these reasons, the Office Action has not established a *prima facie* case of obviousness against Claim 1 (and its dependent claims). For similar reasons, the Office Action has not established a *prima facie* case of obviousness against Claims 21 and 29 (and their dependent

claims).

Accordingly, the Applicant respectfully requests withdrawal of the § 103 rejection and full allowance of Claims 1-10 and 21-35.

III. CONCLUSION

The Applicant respectfully asserts that all pending claims in this application are in condition for allowance and respectfully requests full allowance of the claims.

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SUMMARY

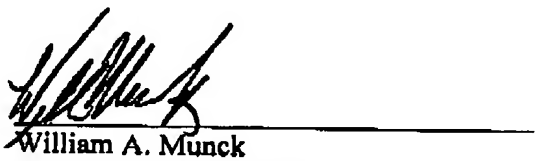
If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@munckbutrus.com*.

The Commissioner is hereby authorized to charge any fees connected with this communication (including any extension of time fees) or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS, P.C.

Date: Aug 21, 2006



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